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RAW SEQUENCE LISTING   DATE: 07/20/2001
PATENT APPLICATION: US/09/898,659   TIME: 14:16:43

Input Set : A:\C32111.app
Output Set: N:\CRF3\07202001\I898659.raw

ENTERED
sec pages

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      3 <110> APPLICANT: Tanksley, Steven D.
      5 <120> TITLE OF INVENTION: GENE CONTROLLING FRUIT SIZE AND CELL DIVISION IN
      6       PLANTS
      8 <130> FILE REFERENCE: 19603/3211
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/898,659
C--> 11 <141> CURRENT FILING DATE: 2001-07-03
     13 <150> PRIOR APPLICATION NUMBER: 60/215,824
     14 <151> PRIOR FILING DATE: 2000-07-05
     16 <160> NUMBER OF SEQ ID NOS: 39
     18 <170> SOFTWARE: PatentIn Ver. 2.1
     20 <210> SEQ ID NO: 1
     21 <211> LENGTH: 492
     22 <212> TYPE: DNA
     23 <213> ORGANISM: Lycopersicon pennellii
     25 <400> SEQUENCE: 1
     26 atgtatccaa cggtaggata taatctaggt ctaatgaaac aaccttatgt tcctcctcac 60
     27 tatgtatctg cccccggcac caccacggcg cggtggtcaa ctggtctttg tcactgtttt 120
     28 gatgaccctg ctaactgttt agttactagt gtttgccctt gtatcacctt tggacagatt 180
     29 tctgaaatac taaacaaagg aacaacttca tgtgggagta gaggtgcatt atattgtttg 240
     30 ctgggactga caggattgcc tagcctatat tcctgcttct acaggtctaa aatgaggggg 300
     31 caatatgatc tggaagaggc accttgtgtt gattgtcttg tacatgtatt ctgtgaacct 360
     32 tgtgctcttt gccaagaata cagagagctt aagaaccgtg gctttgatat gggaataggg 420
     33 tggcaagcta atatggatag acaaagccgg ggagttacca tgcccccctta tcatgcaggc 480
     34 atgaccaggt ga                                                     492
     37 <210> SEQ ID NO: 2
     38 <211> LENGTH: 163
     39 <212> TYPE: PRT
     40 <213> ORGANISM: Lycopersicon pennellii
     42 <400> SEQUENCE: 2
     43 Met Tyr Pro Thr Val Gly Tyr Asn Leu Gly Leu Met Lys Gln Pro Tyr
     44  1               5                  10                  15
     46 Val Pro Pro His Tyr Val Ser Ala Pro Gly Thr Thr Thr Ala Arg Trp
     47             20                  25                  30
     49 Ser Thr Gly Leu Cys His Cys Phe Asp Asp Pro Ala Asn Cys Leu Val
     50             35                  40.                 45
     52 Thr Ser Val Cys Pro Cys Ile Thr Phe Gly Gln Ile Ser Glu Ile Leu
     53         50                  55                  60
     55 Asn Lys Gly Thr Thr Ser Cys Gly Ser Arg Gly Ala Leu Tyr Cys Leu
     56  65                  70                  75                  80
     58 Leu Gly Leu Thr Gly Leu Pro Ser Leu Tyr Ser Cys Phe Tyr Arg Ser
     59             85                  90                  95
     61 Lys Met Arg Gly Gln Tyr Asp Leu Glu Glu Ala Pro Cys Val Asp Cys
     62             100                 105                 110
     64 Leu Val His Val Phe Cys Glu Pro Cys Ala Leu Cys Gln Glu Tyr Arg
     65             115                 120                 125
     67 Glu Leu Lys Asn Arg Gly Phe Asp Met Gly Ile Gly Trp Gln Ala Asn
     68     130                 135                 140
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Input Set : A:\C32111.app
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71 145             150             155             160
73 Met Thr Arg
77 <210> SEQ ID NO: 3
78 <211> LENGTH: 492
79 <212> TYPE: DNA
80 <213> ORGANISM: Lycopersicon esculentum
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83 atgtatcaaa cggtaggata taatccaggt ccaatgaaac aaccttatgt tcctcctcac 60
84 tatgtatctg ccccggcac caccacggcg cggtggtcga ctggtctttg tcattgtttt 120
85 gatgaccctg ctaactgttt agttactagt gtttgccctt gtatcacctt tggacagatt 180
86 tctgaaatac taaacaaagg aacaacttca tgtgggagta gaggtgcatt atattgtttg 240
87 ctgggattga caggattgcc tagcctatat tcctgcttct acaggtctaa aatgagggg 300
88 caatatgatc tggaagaggc accttgtgtt gattgtcttg tacatgtatt ctgtgaacct 360
89 tgtgctcttt gccaagaata cagagagctt aagaaccgtg gctttgatat gggaataggg 420
90 tggcaagcta atatggatag acaaagccga ggagttacca tgccccctta tcatgcaggc 480
91 atgaccaggt ga                                             492
94 <210> SEQ ID NO: 4
95 <211> LENGTH: 163
96 <212> TYPE: PRT
97 <213> ORGANISM: Lycopersicon esculentum
99 <400> SEQUENCE: 4
100 Met Tyr Gln Thr Val Gly Tyr Asn Pro Gly Pro Met Lys Gln Pro Tyr
101   1             5                 10                 15
103 Val Pro Pro His Tyr Val Ser Ala Pro Gly Thr Thr Thr Ala Arg Trp
104             20                 25                 30
106 Ser Thr Gly Leu Cys His Cys Phe Asp Asp Pro Ala Asn Cys Leu Val
107         35                 40                 45
109 Thr Ser Val Cys Pro Cys Ile Thr Phe Gly Gln Ile Ser Glu Ile Leu
110     50                 55                 60
112 Asn Lys Gly Thr Thr Ser Cys Gly Ser Arg Gly Ala Leu Tyr Cys Leu
113   65                 70                 75                 80
115 Leu Gly Leu Thr Gly Leu Pro Ser Leu Tyr Ser Cys Phe Tyr Arg Ser
116             85                 90                 95
118 Lys Met Arg Gly Gln Tyr Asp Leu Glu Glu Ala Pro Cys Val Asp Cys
119             100                105                110
121 Leu Val His Val Phe Cys Glu Pro Cys Ala Leu Cys Gln Glu Tyr Arg
122         115                120                125
124 Glu Leu Lys Asn Arg Gly Phe Asp Met Gly Ile Gly Trp Gln Ala Asn
125     130                135                140
127 Met Asp Arg Gln Ser Arg Gly Val Thr Met Pro Pro Tyr His Ala Gly
128 145             150             155             160
130 Met Thr Arg
134 <210> SEQ ID NO: 5
135 <211> LENGTH: 18
136 <212> TYPE: DNA
137 <213> ORGANISM: Artificial Sequence
139 <220> FEATURE:
140 <223> OTHER INFORMATION: Description of Artificial Sequence: B26 Primer
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RAW SEQUENCE LISTING   DATE: 07/20/2001
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Input Set : A:\C32111.app
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142 <400> SEQUENCE: 5
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146 <210> SEQ ID NO: 6
147 <211> LENGTH: 18
148 <212> TYPE: DNA
149 <213> ORGANISM: Artificial Sequence
151 <220> FEATURE:
152 <223> OTHER INFORMATION: Description of Artificial Sequence: B25 Primer
154 <400> SEQUENCE: 6
155 gactcgagtc gacatcga                                        18
158 <210> SEQ ID NO: 7
159 <211> LENGTH: 23
160 <212> TYPE: DNA
161 <213> ORGANISM: Artificial Sequence
163 <220> FEATURE:
164 <223> OTHER INFORMATION: Description of Artificial Sequence: ORFXF2 Primer
166 <400> SEQUENCE: 7
167 aaacaacctt atgttcctcc tca                                  23
170 <210> SEQ ID NO: 8
171 <211> LENGTH: 20
172 <212> TYPE: DNA
173 <213> ORGANISM: Artificial Sequence
175 <220> FEATURE:
176 <223> OTHER INFORMATION: Description of Artificial Sequence: FW01 Primer
178 <400> SEQUENCE: 8
179 gcccttgtat cacctttgga                                      20
182 <210> SEQ ID NO: 9
183 <211> LENGTH: 21
184 <212> TYPE: DNA
185 <213> ORGANISM: Artificial Sequence
187 <220> FEATURE:
188 <223> OTHER INFORMATION: Description of Artificial Sequence: GSP1 Primer
190 <400> SEQUENCE: 9
191 gatgatttca ttgatcttgc a                                    21
194 <210> SEQ ID NO: 10
195 <211> LENGTH: 36
196 <212> TYPE: DNA
197 <213> ORGANISM: Artificial Sequence
199 <220> FEATURE:
200 <223> OTHER INFORMATION: Description of Artificial Sequence: Abridged
201       Anchor Primer
203 <220> FEATURE:
204 <221> NAME/KEY: unsure
205 <222> LOCATION: (24)..(35)
206 <223> OTHER INFORMATION: N at any position in this sequence is Inosine
208 <400> SEQUENCE: 10
W--> 209 ggccacgcgt cgactagtac gggnngggnn gggnng                  36
212 <210> SEQ ID NO: 11
213 <211> LENGTH: 22
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214 <212> TYPE: DNA
215 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Description of Artificial Sequence: GSP2 Primer
220 <400> SEQUENCE: 11
221 taacatgaac atgcagggag tc                                          22
224 <210> SEQ ID NO: 12
225 <211> LENGTH: 20
226 <212> TYPE: DNA
227 <213> ORGANISM: Artificial Sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Description of Artificial Sequence: Abridged
231       Universal Anchor Primer
233 <400> SEQUENCE: 12
234 ggccacgcgt cgactagtac                                             20
237 <210> SEQ ID NO: 13
238 <211> LENGTH: 20
239 <212> TYPE: DNA
240 <213> ORGANISM: Artificial Sequence
242 <220> FEATURE:
243 <223> OTHER INFORMATION: Description of Artificial Sequence: GSP3 Primer
245 <400> SEQUENCE: 13
246 gggagtcgga gatagcattg                                             20
249 <210> SEQ ID NO: 14
250 <211> LENGTH: 164
251 <212> TYPE: PRT
252 <213> ORGANISM: Lycopersicon esculentum2
254 <400> SEQUENCE: 14
255 Met Asn Pro Ser Ala Gln Pro Ala Tyr Gly Glu Lys Pro Met Thr Gly
256  1               5                  10                  15
258 Val Pro Val Pro Gly Gln Phe Gln Ala Asn His Pro Gly Asn Trp Ser
259             20                  25                  30
261 Thr Gly Leu Cys Asp Cys Phe Ser Asp Ile Ser Ser Cys Cys Leu Thr
262         35                  40                  45
264 Cys Trp Cys Pro Cys Ile Thr Phe Gly Gln Ile Ala Glu Ile Val Asp
265     50                  55                  60
267 Lys Gly Thr Val Ser Cys Gly Ala Ser Gly Ala Leu Tyr Phe Leu Ile
268 65                  70                  75                  80
270 Glu Ala Leu Thr Gly Cys Gly Cys Ile Tyr Ser Cys Phe Tyr Arg Ile
271             85                  90                  95
273 Lys Met Arg Lys Gln Tyr Met Leu Pro Glu Ser Pro Cys Gly Asp Cys
274             100                 105                 110
276 Leu Leu His Phe Cys Cys Glu Cys Cys Ala Leu Cys Gln Glu His Arg
277         115                 120                 125
279 Glu Leu Lys His Arg Gly Tyr Asp Met Ser Ile Gly Trp Gln Gly Asn
280     130                 135                 140
282 Met Asp Asn Gln Asn Gly Gly Ile Ala Met Ala Pro Gly Val Gln Gly
283 145                 150                 155                 160
285 Gly Met Thr Arg
```

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289 <210> SEQ ID NO: 15
290 <211> LENGTH: 134
291 <212> TYPE: PRT
292 <213> ORGANISM: Lycopersicon esculentum3
294 <400> SEQUENCE: 15
295 Met Asp Pro Gln Pro Ala Met Tyr Arg Lys Lys Lys Asn Asp Val Pro
296  1               5                   10                  15
298 Trp Ser Thr Gly Leu Cys Asp Cys Met Ser Asp Pro Lys Asn Cys Cys
299              20                  25                  30
301 Ile Thr Leu Trp Cys Pro Cys Ile Thr Phe Gly Gln Val Ala Glu Ile
302          35                  40                  45
304 Ile Asp Lys Gly Ser Asn Ser Cys Gly Val Asn Gly Ala Leu Tyr Thr
305      50                  55                  60
307 Ile Ile Ile Cys Val Thr Ser Cys Pro Cys Ile Tyr Ser Cys Phe Tyr
308  65                  70                  75                  80
310 Arg Asn Lys Met Arg Gln Gln Tyr Leu Leu Lys Lys Ser Pro Cys Gly
311              85                  90                  95
313 Asp Cys Leu Val His Cys Phe Trp Glu Ala Cys Ala Leu Cys Gln Glu
314          100                 105                 110
316 Tyr Arg Glu Leu Lys Asn Gln Gly Val Asp Met Ser Ile Gly Trp His
317          115                 120                 125
319 Gly Asn Val Glu Arg Gln
320      130
323 <210> SEQ ID NO: 16
324 <211> LENGTH: 168
325 <212> TYPE: PRT
326 <213> ORGANISM: Lycopersicon esculentum4
328 <400> SEQUENCE: 16
329 Met Gly Met Gly Gln Tyr Gln Gln Gly Met Gln Pro Ala Pro Pro Met
330  1               5                   10                  15
332 Met Gly Ile Pro Phe Lys Pro Ile Leu Pro Thr Glu Ser Trp Lys Thr
333              20                  25                  30
335 Gly Leu Phe Asp Cys Met Glu Asp Pro Thr Asn Ala Leu Ile Thr Ala
336          35                  40                  45
338 Cys Phe Pro Cys Leu Thr Phe Gly Gln Ile Ala Glu Ile Val Asp Ser
339      50                  55                  60
341 Gly Gln Thr Pro Cys Thr Thr Ser Gly Leu Ile Tyr Gly Ala Ile Leu
342  65                  70                  75                  80
344 Met Phe Ile Gly Met Pro Cys Ile Met Ser Cys Thr Tyr Arg Thr Lys
345              85                  90                  95
347 Leu Arg Ser Gln Tyr Gly Leu Met Glu Ser Pro Ala Pro Asp Trp Val
348              100                 105                 110
350 Ile His Cys Phe Cys Glu Cys Cys Ala Leu Cys Gln Glu Tyr Arg Glu
351          115                 120                 125
353 Leu His His Arg Gly Leu Asp Pro Ser Ile Gly Trp Gln Gly Asn Gln
354      130                 135                 140
356 Ala Gln Lys Gln Asn Met Gln Leu Gln Gln Ala Met Val Pro Ser Ser
357 145                 150                 155                 160
359 Ser Pro Ser His Asp Gly Leu Ile
```

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY   DATE: 07/20/2001
PATENT APPLICATION: **US/09/898,659**   TIME: 14:16:44

Input Set : **A:\C32111.app**
Output Set: **N:\CRF3\07202001\I898659.raw**

L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:762 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:765 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:768 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:822 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:886 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:994 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34
L:1003 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34
L:1045 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35
L:1087 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36
L:1111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37
L:1144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38